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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/623,882	07/25/2002	Jaakko Vilo	6009-4591	1831

7590 01/24/2005

Morgan & Finnegan  
345 Park Avenue  
New York, NY 10154-0053

EXAMINER
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CECIL, TERRY K

ART UNIT	PAPER NUMBER
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1723

DATE MAILED: 01/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/623,882

Applicant(s)

VILO, JAAKKO

Examiner

Mr. Terry K. Cecil

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 4-29-2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 9-11-00 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>042003</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Specification*

1. The specification is objected to because of the following:
  - The abstract of the disclosure is objected to because it includes legal language, e.g. “comprising”. Correction is required. See MPEP § 608.01(b).
  - “drawing” should be “drawings” (last line of page 5) and reference no. “3” should be “4” (page 6, line 21).

### *Drawings*

2. The drawings are objected to because of the following:
  - The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the “filtering (means)” and “members for feeding the material to be processed” of claim 1 must be shown or the features canceled from the claims. No new matter should be entered.
  - The leader of reference no. “31” in figure 2 should refer to the axis, as explained in the specification.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the

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drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Objections***

3. Claims 1 and 7 are objected to because of the following:
- In claim 1, reference no. "11" in line 12 should be "15" and in claim 7, reference nos. (15 and 31) are incorrect and should be deleted or changed to coincide with the specification.
  - "the filtering product, i.e. the filtered material" is redundant and verbose. Only one of the terms should be used.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1-7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention because of the following reasons:

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- The following terms lack antecedent basis: “the filtering product” (claim 1, line 6); “the discharge conduit” (claim 1, line 7); “the measurable surface height” (claim 1, line 12); “the axis” (claim 2, line 2); “the discharge conduit supporting structure” (claim 4); “the member for moving the adjusting element” (claim 7).
- In claim 1, “...feeding the material to be processed *into filtering*..” is indefinite, since it is unclear if a element is being recited. Did applicant intend to claim “...into a *filtering means*”?
- In claim 7, the phrase “the measuring of the filtered material surface height” is indefinite, since it is unclear if a element is being recited. Did applicant intend to claim “a means for measuring the filtered material surface height”?
- Claims 2-6 are rejected since they suffer the same defects as the claims from which they depend.

### ***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.

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4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

7. Claims 1-2 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dosoudil (U.S. 5,362,403) in view of Westbrook (U.S. 3,334,861). Dosoudil teaches an apparatus including a filter means within a pressurized space and a conveyor 1. Material collects in a discharge conduit and is released by a valve element 3 [as in claim 1] in response to level sensing means in electrical connection with a control member 7 [as in claim 7]. Dosoudil does not teach his adjusting means to include two concentric adjusting elements movable relative to one another. However, such is taught by Westbrook, where one of the elements are rotatable [as in claim 2]. It is considered that it would have been obvious to one ordinarily skilled in the art at the time of the invention to have the adjusting means/actuator of Dosoudil to be replaced with the adjusting elements/actuator of Westbrook since he teaches the benefit of uniformly varying the rate of flow through the valve (col. 1). This would improve the control of material level in the discharge conduit of Dosoudil. *(Note that the last three lines of claim 1 are considered to be an intended use of the apparatus that fails to further structurally define the invention. Did applicant intend to claim the corresponding structure of a control unit, a measuring means and an actuating means that are adapted to perform the cited intended use?)*

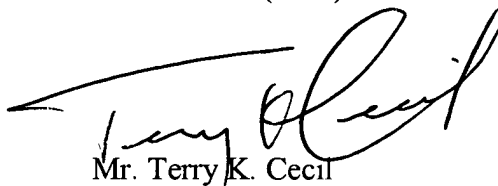
8. Claims 3-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dosoudil in view of Westbrook as applied above and in further view of Johanson (U.S. 5,992,689). Johanson teaches an ultrasonic sensor 98 or a weight sensor 88 (which measures force or tension) on the structure due to the weight of material [as in claims 3-6]. It is considered that it would have been obvious to one ordinarily skilled in the art at the time of the invention to have either of the

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sensors of Johanson in the modified Dosoudil, since Johanson teaches the benefit of maintaining a constant amount of particulate matter in the hopper by controlling the discharge rate of the hopper as the input flow of particulate material to the hopper varies (col. 7).

9. Contact Information:

- Examiner Mr. Terry K. Cecil can be reached at (571) 272-1138 at the Carlisle campus in Alexandria, Virginia for any inquiries concerning this communication or earlier communications from the examiner. Note that the examiner is on the increased flextime schedule but can normally be found in the office during the hours of 8:30a to 4:30p, on at least four days during the week M-F.
- Wanda Walker, the examiner's supervisor, can be reached at (571) 272-1151 if attempts to reach the examiner are unsuccessful.
- The Fax number for this art unit for official faxes is 703-872-9306.
- Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Mr. Terry K. Cecil  
Primary Examiner  
Art Unit 1723

TKC  
January 20, 2005